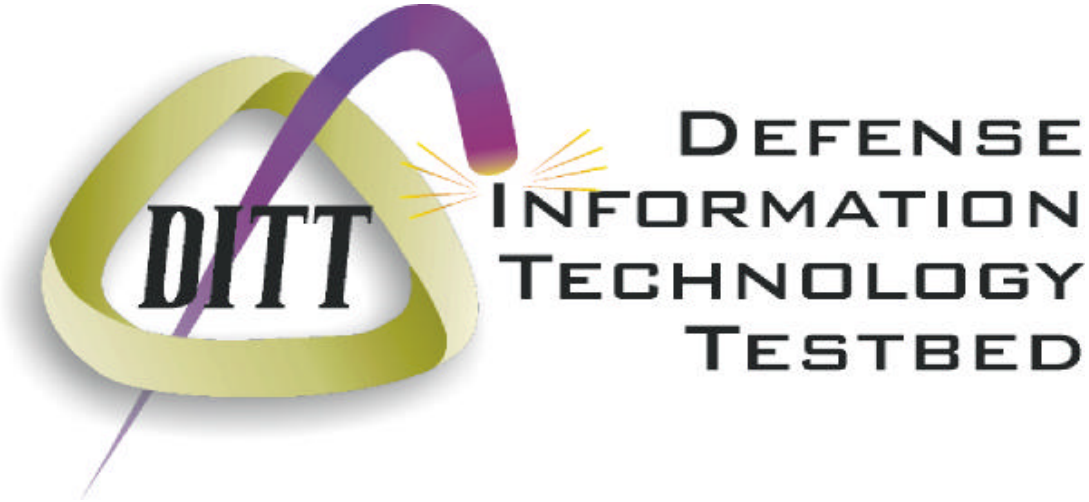
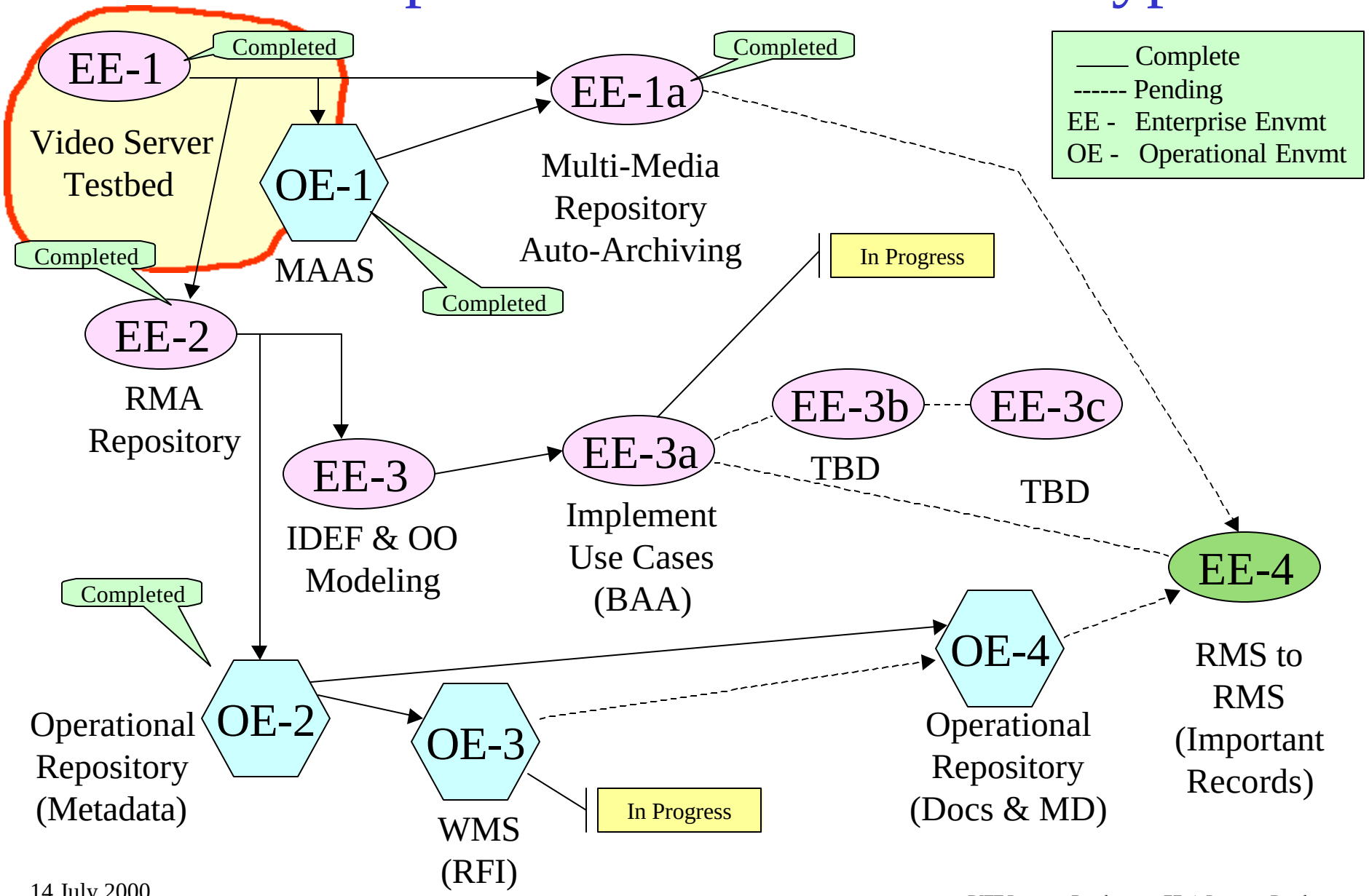


DITT Prototyping Efforts
EE 1 - Video Server Testbed

Updated June 2000

Prepared by
DITT Core Team
Center for Army Lessons Learned

DITT Enterprise Environment Prototype 1



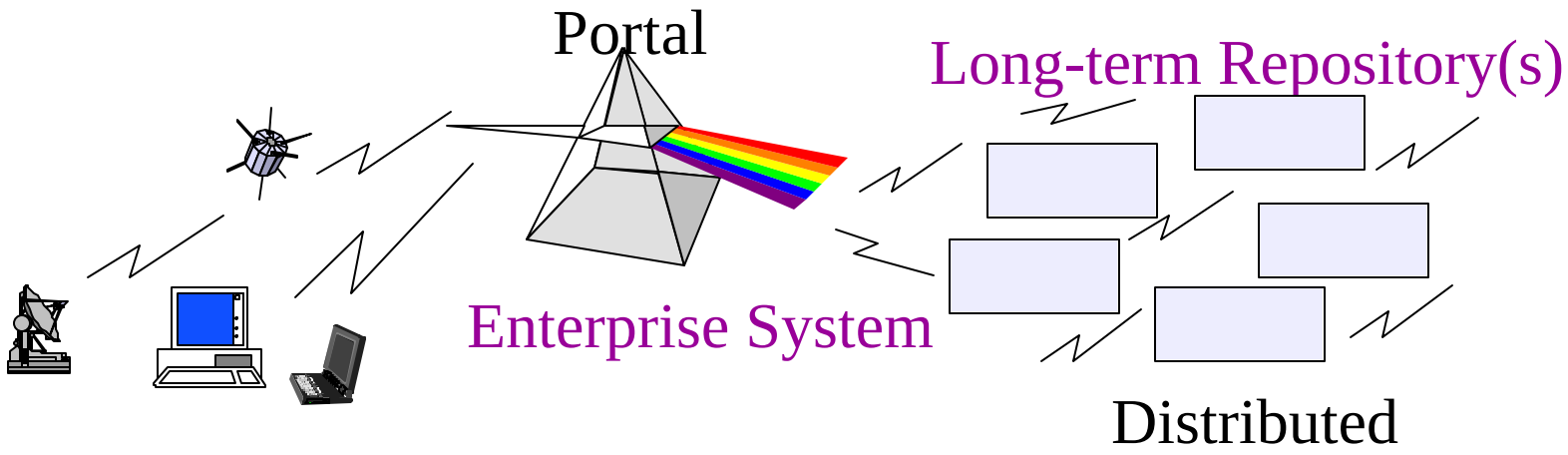
DITT RIM Projects - Multimedia Records, Video Server Testbed, EE-1

- Objective:
  - automate the collection of full motion video, real-time
  - augment the full motion video and all related components with metadata for search, retrieval and functional management
  - link all record components together
  - make available in an enterprise environment for authorized users
  - within 10 minutes of transmission
- Use Unmanned Aerial Vehicle (UAV) records for your test and evaluation

EE-1 DITT VSTB **Purpose --** the "Big Picture"

- Aggressively incorporate state-of-the-art *commercial* methods and technology to capture, store, manage, and make available via web browser multimedia (UAV) records *real-time*.
- Establish DITT operational prototypes using live UAV motion imagery.
  - front-end capture system(s) (MAAS)
  - long-term repository accessible via the Internet (VSTB)
  - manage multimedia and multiple component information as records
- Define, implement and integrate Records and Information Management methodologies and technologies from front-end capture systems to a long-term repository.
- Share lessons learned via the DITT technology transfer program across the Government.

EE-1- Multi-Media Archiving



- Web-enabled (Internet)
- Commercial Standards
- Customers search/retrieve based on their information needs
- Data integrity
- Records Management application
  - records available, searchable, retrievable, managed, preserved

- Input
  - 7-10 second segments from entire UAV mission record (GBS/JBS)
  - value-added mission records (MNICC)
- Output
  - any/all records, data, information that was input

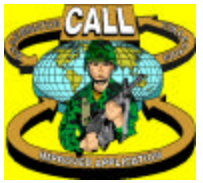
EE-1 Primary VSTB Requirement

"We need to define a process that enables us to collect, identify, store, manage, search and retrieve multi-media records. UAV records are the toughest, let's start there."

- Sam Grant, Director, National Technology Alliance, 1995

The UAV record set will provide us with the opportunity to figure out how to collect, capture, identify, store and manage electronic multimedia and multi-component documents.

-Center for Army Lessons Learned, DITT Core Team



EE-1 Primary VSTB Requirement

"We need to define a process that enables us to collect, identify, store, manage, search and retrieve multi-media records. UAV records are the toughest, let's start there."

Requirement: Within 10 minutes of UAV flight transmission, capture, collect, archive and make available via a web browser -- with no human intervention. Collection, capture, identification and upload must be real-time and unattended (hands-off).

Result: Video Server Testbed at Leavenworth established with GBS Receive Suite. Proof-of-Concept indicated capability to collect and fully archive UAV utilizing voice activation within 2 minutes of transmission as an unattended process.

E.g., UAV Fileroom, CALL DB

EE-1 VSTB Proof-of-Concept

- Capture Predator UAV Video via GBS or DATM-C
- Generate a Voice Transcript from a Predator Mission analyst
  - Exploitation Support Data (ESD) stream will augment audio capability
- Create or capture a mosaic image (JPEG/TIFF) of the Video
- Extract mission metadata from the Video Feed (ESD)
  - i.e., GPS position, Heading, Target Position, Lat/Lon...
- Upload the "Mission File Sets" into the CALL DB continuously.

Collection, capture, identification and upload must be real-time and totally automated (hands-off).

EE-1 VSTB Operational Status

- GBS Receive Suite operational
- Capability established to auto archive incoming video using voice activation to populate content of metadata elements.
- Capability to storage up to 30 days of video, on-line.
  - currently, 80 GB or ~ 130 hours of video
- DoD-STD 5015.2 Capable
- Accessible via web browser
- Searchable and retrievable utilizing simple web browser or robust commercial search engines
- Controlled Access

Want more details?